

ABSTRACT

This invention relates to an expansion valve, which has rectangular flow channels for assembling inlet and outlet pipes of an evaporator with an inlet pipe of a compressor and an outlet pipe of a condenser at an approximate right angle, and a guide part formed on the flow channel, thereby improving a mounting efficiency and reducing flow resistance and noise, and the expansion valve includes a body having at least one or more flow channels, each of which has inlets and outlets whose central lines are at a right angle to each other, and a guide part formed between the inlet and the outlet; a head part mounted on the body and reciprocating a rod in an axial direction by expansion and contraction actions according to a temperature change of the working fluid discharged from an outlet of an evaporator and flowing through the flow channel; and opening means for controlling a flow amount of the working fluid flowing through the flow channel according to the movement of the rod.